## BRITISH MACROLEPIDOPTERA, 1981 A REVIEW OF THE INDIGENOUS BRITISH MACROLEPIDOPTERA FOR 1981

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This review is intended to complete the quartet of annual reviews covering the butterflies, microlepidoptera, macrolepidoptera and immigrants. 1981 will be remembered for the generally dismal nature of the season for larger moths, but a number of features deserve mention - the publication of two new books, the discovery of a Geometrid moth new to Britain, and the coming of the Wildlife and Countryside Act 1981. This act probably represents the most sinister development to affect entomologists for many years. Five species of moth are "protected" – Thetida smaragdaria F. (Essex emerald); Zygaena viciae D. & S. (New Forest burnet); Pareulype berberata D. & S. (barberry carpet); Acosmetia caliginosa Hbn. (reddish buff) and Siona lineata Scop. (black-veined moth). Fines of up to £1000 can be levied for each specimen taken or possessed illegally. Offending entomologists therefore risk almost certain penury and possible incarceration from the injudicious use of their nets in certain localities. A more objective view of the Act is given by Stubbs (1982 a and b) and Lonsdale (1982).

Two major publications dealing with the macrolepidoptera were launched in 1981, the first being "An Identification Guide to the British Pugs" - a much needed volume featuring excellent colour plates, informative text and genitalia drawings. The second was a limited edition of "The Larvae of the British Lepidoptera not Figured by Buckler", by G. M. Haggett. 35 colour plates illustrate some 78 species or sub-species, with detailed text. Both were published by the BENHS. A number of interesting papers have appeared in other journals - a detailed discussion of genetic explanations for all-female broods of Philudoria potatoria L. is worth reading (Majerus, 1981a). Dr Majerus also discusses the genetics of the attractive form subroseata of Cyclophora albipuncata Hufn. (Majerus, 1981b). Foodplant and parasite differences between our two copper underwing species Amphipyra pyramidea L. and A. berbera svenssoni Fletch. are dealt with by Shaw (1981). Of passing interest to British entomologists are two Danish papers (Kaaber, 1980 and 1981) on the bionomics and systematics of some Danish Eupithecia species. These detailed, illustrated papers conclude that Eupithecia goosensiata Mab. is only a sub-species of E. absinthiata Clerck, and that E. fraxinata Crewe is a sub-species of E. innotata.

From a field entomologist's point of view the year as a whole could be described as "poor", although little weight can be given to such subjective descriptions. The only quantitative data that can be offered stem from a static trap in Kent which yielded 9.6% fewer species than 1980 and 9% fewer individuals. Some correspondants were pleased to report depressed numbers of *Noctua pronuba* L. and *Apamea monoglypha* Hufn., although some species were noted \*4 Steep Close, Orpington, Kent BR6 6DS.

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in enhanced numbers — for example *Mormo maura* L. in Southern Counties and *Tyria jacobaeae* L. in Northern England. *Clostera anachoreta* D. & S. became newsworthy in 1979 when a significant number of individuals and larvae were captured at Dungeness, Kent. More were seen in 1980, and many thousands of bred larvae were released at Dungeness that year. Very few were reported in 1981, all during August with no reports of first brood specimens of this supposedly bivoltine species. Because of the numerous releases it is impossible to assess the status of this species but presumably it can be classified as temporarily established following an immigration in (?) 1978. In a broadly similar category is *Deltote bankiana* F. which was noted again from Sandwich in Kent.

In times of general ecological doom it is pleasing to see insects extending their range and colonising new habitats. Idaea vulpinaria H.-S. continues to spread into Kent and Essex from the Thames Estuary, often occurring in new localities in considerable numbers. The foodplants of this species were reviewed by West (1980). Lithophane leautieri Boisd. continues to occur in new localities throughout Southeast England, and northwards to Warwickshire where a second specimen was noted in 1981. The early larvae of this species are reputed to require the flowers of *Cupressus macrocarpa*. and the spread of the moth has been linked with the progressive maturation of planted macrocarpa specimens. Associated with the same foodplant is Eupithecia phoeniceata Rambur whose easterly spread along the south coast is well documented. The moth is now reported well established in Eastbourne. Sussex. There are scattered records for Kent (although none for 1981), and a single specimen recorded from Tilbury, Essex, in August 1981.

Rhyacia simulans Hufn. continues the southerly extension of its range into Kent, being recorded from many localities in Northern Kent, with a single specimen from Dungeness. Aporophyla nigra Haw, is also advancing into Kent from Surrey, although at a more leisurely pace, occurring in good numbers in a few localities. Other notable captures during 1981 include a gravid female Catocala fraxini L. in Hampshire, Schrankia costaestrigalis Steph. from Dartford, Kent (the first record here for around 70 years) and Hypena crassalis Fab. from the same locality, far away from its normal bilberry habitats. An article by Brian West on the foodplants of Camptogramma bilineata L. provoked a brief correspondance, and as a result five new natural foodplants for this common species were reported. One wonders how much useful, unpublished information on larval foodplants still languishes in the diaries of entomologists. Nola confusalis larvae were also noted feeding on lime-blossom in Norfolk. Hemaris fuciformis L. was noted in many of its known localities in Southern England, but no reports of H. tityus L. reached the reviewer's ears. Surprisingly for such a poor year a number of species were recorded on rather perverse dates ranging from a Phlogophora meticulosa L. on 17th January to Miltochrista miniata Forst. on 16th September.

Three species were added to the British list in 1981: two of these being accidental imports – Antichloris eriphia Fab. (Ctenuchi-

dae) bred from banana and *Palpifer sexnotatus* Moore (Hepialidae) bred from tubers of arum lily. However the most outstanding discovery of the year was the feathered beauty, *Peribatodes secundaria* D. & S. in a Kentish woodland popularly known as "Ham Street". The moth was noted in considerable numbers and one wonders how such a large moth resident in such a well-worked locality escaped attention. All credit to Bernard Skinner whose illustrated paper on this species (Skinner, 1981) separates *secundaria* from its congener *P. rhomboidaria* D. & S.

It is hoped that future years will produce a more balanced coverage of the country, and correspondants are invited to send details of interesting 1982 observations as soon as convenient. My thanks to those entomologists who provided comments on 1981, in particular, N. Birkett, R. G. Chatelain, F. H. Clouter, N. F. Heal, S. M. Jackson, M. Parsons.

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THE STRIPED HAWKMOTH IN DEVON IN 1980. – A single specimen of *Hyles lineata livornica* Esper was taken by a Robinson M V light trap (125 watt) operated by Mrs. L. J. Craik at "Aberlemno", Down Road, Tavistock, Devon on 4 June 1980. It was photographed and released. The record should be added to the comprehensive records (two other specimens in Britain in 1980) given by Bretherton & Chalmers-Hunt in *Ent. Rec.* 93 47-54. – Dr. J. C. A. CRAIK, Dunstaffnage Marine Research Laboratory, P.O.Box 3, Oban, Argyll, PA34 4AD.